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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/532,352	03/21/2000	Kogo Endo	9319S-000127	7425

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EXAMINER

LESPERANCE, JEAN E

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 08/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/532,352	ENDO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jean E Lesperance	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 21 March 2000.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-31 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 21 March 2000 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_ .
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)              | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u> . | 6) <input type="checkbox"/> Other: _____ .                                   |

## DETAILED ACTION

### *Drawings*

This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 11, and 13 are rejected under 35 U.S.C. 102 (b) as being unpatentable over U.S. Patent # 5,728,591 ("Takahashi et al.").

As for claim 1, 4, 11, and 13, Takahashi et al. teach Fig. 21(d) that is a section a showing a microminiature and highly dense active matrix type light valve device which is assembled by using the aforementioned integrated circuit chip 167. The light valve device is composed of an opposed substrate 171 which is arranged opposite to the integrated circuit chip 167 at a predetermined gap, and liquid crystal layer 172 filling up said gap and made of an electrooptical substance layer (column 20, lines 47) corresponding to "display panel having an electrooptic material layer on a substrate, said display panel having a driver integrated circuit mounted on an extended area in which an edge of the substrate, said extended area provided in at least a margin of said display panel, Fig. 21(c) corresponding to wherein a control circuit board, provided

above said driver integrated circuit so as to be substantially placed within said extended area, is connected to an input terminal portion of said driver integrated circuit".

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 10 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent # 5,728,591 ("Takahashi et al.") in view of U.S. Patent # 4,379,621 ("Ikeda et al.").

As for claim 2, Takahashi et al. teach Fig. 21(d) that is a section a showing a microminiature and highly dense active matrix type light valve device that is assembled by using the aforementioned integrated circuit chip 167. The light valve device is composed of an opposed substrate 171 which is arranged opposite to the integrated circuit chip 167 at a predetermined gap, and liquid crystal layer 172 filling up said gap and made of an electrooptical substance layer (column 20, lines 47) corresponding to a display device comprising extended area in which an edge of one of the substrates extends further than an edge of the other substrate, said extended area provided in at least a margin of said display panel, Fig. 21(c) corresponding to wherein a control circuit board, provided above said driver integrated circuit so as to be substantially placed within said extended area, is connected to an input terminal portion of said driver

integrated circuit. Accordingly Takahashi et al. teach all the claimed limitations as recited in claim 2 with the exception of providing an electrooptic material layer sandwiched between a pair of electrodes.

However, Ikeda et al. teach a plurality of parallel finger electrodes 12 and 13 in opposed relation connected to source 14. The finger electrodes are oriented at 45 degrees relative to the polarization axes of the first and second polarizers 2 and 6 (column 3, lines 24-28).

It would have been obvious to utilize the finger electrodes 12 and 13 as taught by Ikeda et al. in the light valve device disclosed by Takahashi et al. because this would provide an image display device which produces a sharply defined image.

Claims 3, 6, 12, and 15 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent # 4,379,621 ("Ikeda et al.") in view of U.S. Patent # 5,728,591 ("Takahashi et al.").

As for claims 3, 6, 12, and 15, Ikeda et al. teach a display panel (column 1, line 16); a plurality of parallel finger electrodes 12 and 13 in opposed relation (column 3, lines 24-25) corresponding to a first and a second substrate opposed to each other; a transparent electrooptic plate of ferroelectric material between said first and second polarizers (column 7, lines 41-42) corresponding to electrooptic material layer provided between the first and second substrates; the finger electrodes 41a and 41b so that the electrode 42b is close to the adjacent matrix signal 42k-l (column 4, lines 23-26) corresponding to a first extended area provided in one of adjacent margins of said display panel; a second extended area provided in the other margin (column 4, lines 33-

43); scan finger electrode 41b and further undesirable capacitive coupling between scan finger electrodes 41a, 41b and adjacent scan electrodes 41j+l (column 4, lines 36-38) corresponding to scanning electrodes formed on a surface of the first substrate which is opposed to the second substrate; a scanning driver integrated circuit connected to said scanning electrodes which is mounted on the first extended area, in which the first substrate extends further than an edge of the second substrate (column 5, lines 42-53).

Accordingly Ikeda et al. teach all the claimed limitations as recited in claim 3 with the exception of providing a data signal driver integrated circuit.

However, Takahashi et al. teach a mask ROM , the data are written in the individual channel forming regions of the transistors elements which are integrally formed in an array shape (column 11, lines 59-62) corresponding to a data signal driver integrated circuit.

It would have been obvious to utilize the data written in the individual channel as taught by Takahashi et al. in the image display device disclosed by Ikeda et al. because this would provide a highly densified semiconductor device.

As for claims 5, 8, 14, 17, 20-22, 24-25, 27, 29, and 31, Ikeda et al. teach a light scattering properties of the ceramic material that are attributed to a change on structure of the material under the influence of an electric field applied in the direction of thickness of the material (column 1, lines 29-33) corresponding to a circuit-wiring pattern formed on a flexible insulating-resin substrate and electronic components provided for controlling a driving of said display panel.

As for claims 7, 16, 23, and 28, Takahashi et al. teach a thin film laminated layer 1 formed integrally with transistors elements and a support layer 2 for supporting the thin film laminated layer 1(column 5, lines 39-41) corresponding to a multilayer structure having insulating a layer interposed between a plurality of wiring layers in which predetermined upper and lower wiring layers are connected via a through hole or a via hole.

As for claims 9, 18, and 30, Takahashi et al. teach an electrooptical substance such as a liquid crystal layer (column 13, lines 6-7) corresponding to said electrooptic material layer is a liquid-crystal layer.

As for claims 10, 19, and 26, Ikeda et al. teach an electroluminescent display (column 1, line 14) corresponding to an electrooptic material layer is an electroluminescent light emitting layer including an electroluminescent material.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (703) 308-6413. The examiner can normally be reached on from Monday to Friday between 8:00AM and 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (703) 305-4709 .

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

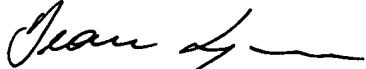
**or faxed to:**

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Jean Lesperance



Art unit 2674

Date 7-27-2002



RICHARD HJERPE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600